factor for vertical transmission to neonates. The present study was done to compare GBS colonization between an urban and a rural society in National Capital Region of New Delhi and also to find out the capsular polysaccharide type distribution in the two communities. Therefore samples were routinely collected from the pregnant women's from July 2004 to July 2007. From each woman samples were taken from hypo-vaginal as well as rectum areas. We have collected total 200 samples (100 each from rural as well as urban areas). An analysis was also conducted to collect data on socio-economic, demographic, history of current pregnancy and obstetric history. In the rural areas more women were found colonized by GBS (30%) as compared to the urban areas (20%). Serotype, Ia (25%), III (18%) and II (15%) were the dominating serotypes seen in the two areas. GBS type Ia was found the predominant type in both areas. To check the invasiveness of the Indian predominant serotype (Ia), the adherence to and invasion of the human lung epithelial cell line A549 by GBS serotype Ia (India) were compared with those of serotype III (USA) strains by a conventional method. The maximum invasive efficiency was found to be 2% in case of type Ia as compared to 1.8% in case of type III. Additionally, comparative proteomics analysis using MALDI-TOF was also performed between Indian (type Ia) and USA (type III) strains for differential expression in protein profile of the two predominant serotypes. These findings will be presented.

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69.030

Comparison Between Official Figures and Exact Incidence Rate of Human Brucellosis in Qom Province of Iran

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Background: Brucellosis remains an important zoonotic disease which persists in all provinces of Iran. Since in Iran both direct and indirect transmission is the potential sources of human brucellosis, epidemiological studies have revealed that true numbers of cases has huge difference with official figures that reports by health systems.

Methods: The study area located in central of Iran with a population about 1046737 in 2006. All patients with clinical signs (examined by physicians) and confirmed in laboratory tests during October 2005 to September 2006 recruited in the study. Official numbers of human brucellosis in this province was provided from ministry of health and medical education.

Results: In the period of investigation we found a total of 2061 confirmed case (51/45 male and 48/6% female). Geometric mean for Wright, 2ME and Coombs wright was 1: 339/8, 1:212/6 and 1:348/5 respectively. Incidence rate in this period is 196/9 (per 100000 person), on the other hand according to official reports we had 140 cases in this period (I.R. = 13/4per 100000 person). Maximum number of cases were in May, June and July. the number of people infected. Surveillance program base on medical laboratory diagnosis can be a potential good program for field evaluation and control of disease.

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69.031

Escherichia coli Isolates from Cases of Japanese Travelers with Reported Diarrhea

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Eschetichia coli was widely known as major course of travellers' diarrhea. However, it was not targeted disease of investigation under Quarantine Law in Japan since the pathogen is normal flora of human. The prevalence of this pathogen among Japanese travellers reported diarrhea has not looked into until today. Samples obtained from returned passengers arrived in Centrea Airport in Nagoya, Japan was examined for *E. coli* isolation. Over 600 samples screened and sampled. Around 150 were isolated as pilot study to look into the prevalence of different groups of pathogenic *E. coli*. PCR and traditional biochemical analysis revieled representation of every group but with significant numbers of EAggEC. The result supported previous studies from other countries and also revealed that EAggEC diarrhea seems to share significant portion among the cases. We are currently looking into the origin of strains where cases are travelled immediately prior to isolation and symptoms.

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New Approaches to Bacterial and Fungal Diagnostics (Poster Presentation)

70.001

Differentiation Bacterial from Viral Infection-Advantage of Procalcitonin

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Background: Procalcitonin is prohormone of calcitonin containing 116 amino acids. It is also a useful indicator of severity of bacterial infections. Methods and Materials: We compare other studies and articles about procalcitonin

(PCT) and its effects and important for quickly distinguishing between bacterial and viral infections in children and infants

Results: We found that the procalcitonin (PCT) concentrations increases in bacterial infections but remains low in viral infections and inflammatory diseases. The change is rapid and molecule is stable, making it as potentially useful marker for distinguishing between bacterial and viral infections.

Discussion: Its advantages over CRP, IL-6 and INF alpha are clear but it doesn't mean that those methods, despite some disadvantages earlier explained, should be rejected.

Comclusions: PCT may be useful in an emergency room for differentiation of bacterial from viral infections in children and for making decisions about antibiotic treatments. The change is rapid and the molecule is stable, making it a potentially useful marker for distinguishing between bacterial and viral infections. Comparing PCT with CRP (C reactive protein), interleukin 6, and interferon alpha demonstrates increased values for PCT than for the others for and thus may be better for differentiation between bacterial and viral infections.

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70.002

Diagnostic Value of Brucella ELISA (IgG and IgM) in Patients with Brucellosis in Kashan, Iran - 2004

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Keywords: Brucellosis; Wright; Coombs Wright; 2ME; ELISA (IgM; IgG)

Objectives: Brucellosis is an important disease with many complications that is almost frequent in Kashan. This study was designed to compare the diagnostic value of ELISA test (IgM, IgG) with that of serologic agglutination tests (Wright and Coombs Wright) in patients with brucellosis in Kashan. Early diagnosis of disease is very important and these tests very useful. Method and material: This study was a case control study and 31 patients with brucellosis and 29 controls were enrolled. ELISA and Wright and Coombs Wright tests were done before and end of treatment and the results were analyzed

Results: Sensitivity of ELISA IgM and IgG were 76% and 75% respectively and specificity of them was 100%. Positive predictive value of both was 100% and negative predictive value of them was 80% and 79% respectively.

Conclusion: Thus ELISA test considering sensitivity and specificity of it is a reliable and appropriate test in the diagnosis of patients with Brucellosis. Therefore, ELISA can be used for better diagnosis.

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70.003

Prevalence of Typhoid Fever in Kathmandu Valley and Its Rapid Diagnosis by Detection of IgM Antibodies, Using Commercial Kit

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Keywords: Salmonella typhi; Immunochromatography; Culture; Widal test

Background: Aim of this study was to find out effectiveness of commercial testing kit for Salmonella typhi IgM in early diagnosis of enteric fever.

Methods: A total 81 patient 34 females and 47 males and age group between 5 to 78 years, during 25 July 2006 to 30 December 2006 were subjected to study. All samples were tested for S. typhi IgM (Enterocheck-WB testing kit), total WBC count, hemoglobin and alanine aminotransferage (ALT) and subjected to culture for salmonella

Results: Among all suspected typhoid fever clients, the disease was confirmed bacteriologically in 11 (13.6%), where as 20 (24.7%) were considered to have typhoid fever on clinical backgrounds and rise or fall in the titer of salmonella antigens through widal test. The Enterocheck-WB showed its diagnostic specificity and sensitivity 57% and 71%, respectively which were lower than those of widal test (70% and 95%, respectively), but combined culture and S. typhi IgM assay (sensitivity 96% and specificity 98%) were superior to combined culture and widal test (sensitivity 87% and specificity 95%).

Conclusion: The major advantages of the dipstick assay are; easy to use, not require special equipment or training, and uses stabilized components. It therefore, has a potential high degree of acceptability for patients with suspected typhoid fever but cultures are negative or in areas where culturing facilities are not available.

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70.004

Detection of E.coli O157:H7, V.cholerae, and S. typhimurium by Multiplex PCR

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Escherichia coli O157:H7, Vibrio cholerae, and Salmonella typhimurium are pathogenic bacteria found in contaminated water and food. No assay method is currently available on simultaneous detection or identification of all the three pathogens. Our aim was to develop a rapid and reliable method for this purpose. A protocol for sample collection, and a PCR procedure was designed specifically for the assay. Selected fragments of 239 bp, 432 bp, and 360 bp for E. coli O157 lipopolysaccharide (LPS) gene (rfbE), V.cholerae cholerae toxin gene (ctx), Salmonella typhimurium putative cytoplasmic protein gene (STM4497) respectively, were amplified from the extracted bacterial DNA samples in a single tube by multiplex PCR. The multi-